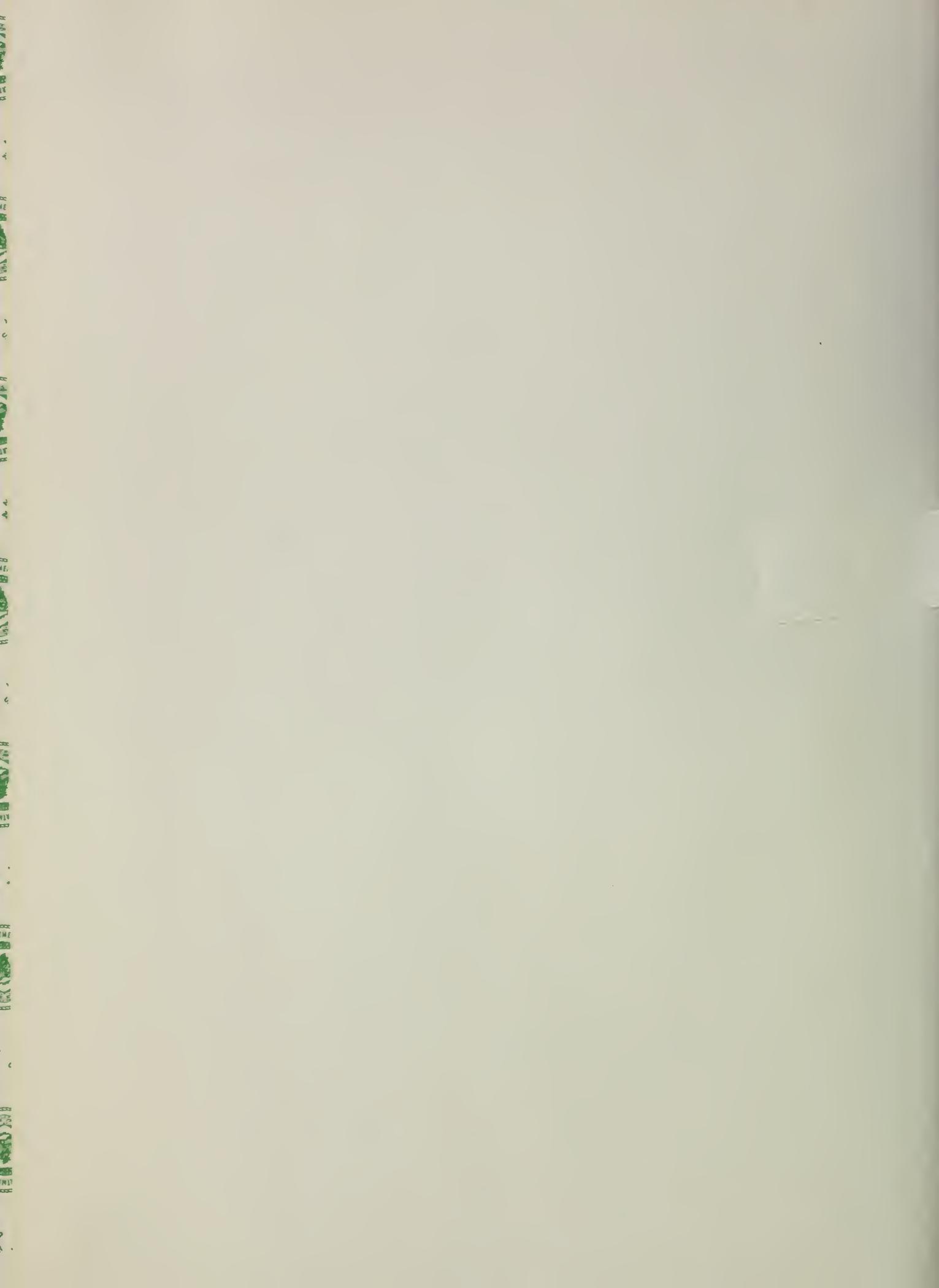


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PROCUREMENT SECTION  
CURRENT SERIAL RECORDS



# **WATER SUPPLY OUTLOOK FOR WASHINGTON**

Prepared by

**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, U.S. Geological Survey, National Park Service, and other Federal, State and Private organizations.

AS OF  
**FEB. 1, 1973**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



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# **WATER SUPPLY OUTLOOK FOR WASHINGTON**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

*Issued by*

KENNETH E. GRANT  
ADMINISTRATOR  
SOIL CONSERVATION SERVICE  
WASHINGTON, D.C.

*Released by*

GALEN S. BRIDGE  
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SOIL CONSERVATION SERVICE  
SPOKANE, WASHINGTON

*In Cooperation with*

JOHN A. BIGGS

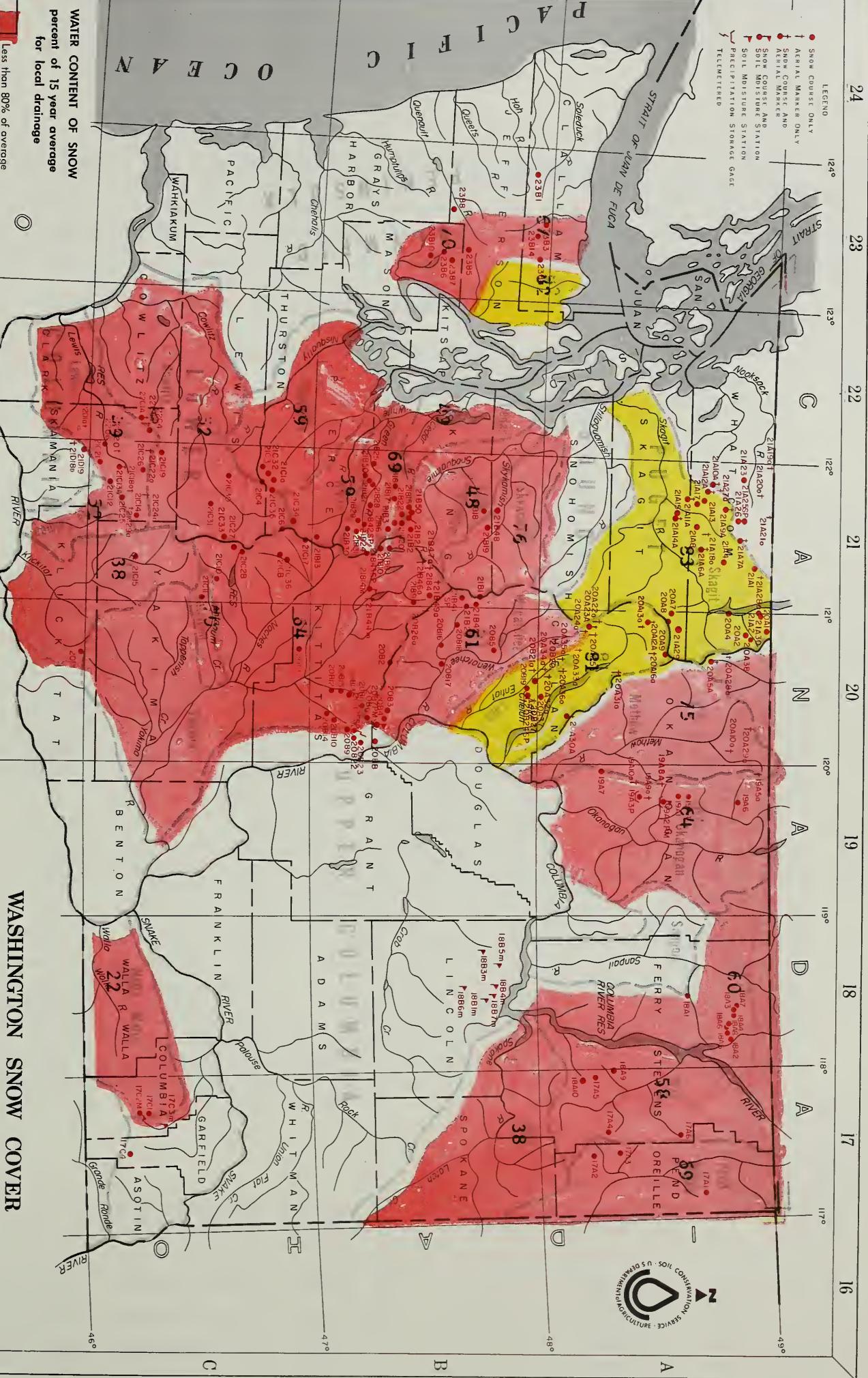
DIRECTOR  
DEPARTMENT OF ECOLOGY  
STATE OF WASHINGTON

*Report prepared by*

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE  
360 U.S. COURTHOUSE  
SPOKANE, WASHINGTON 99201

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**Legend**

- Less than 80% of average
- Within 20% of average
- More than 20% above average

# INDEX TO WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

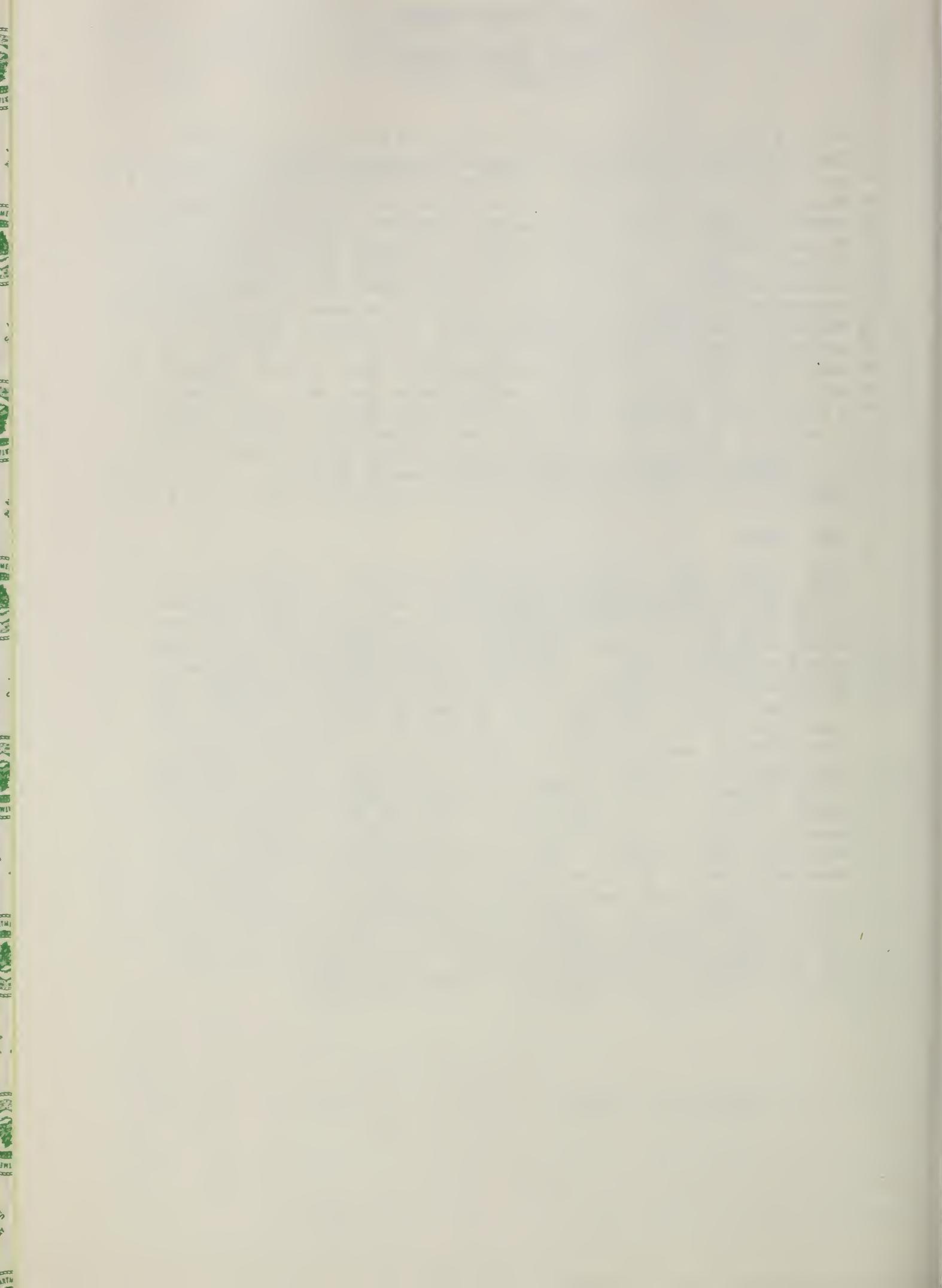
NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.	NAME						
						NUMBER	SEC.	TWP.	RANGE	ELEV.	NAME	
<b>UPPER COLUMBIA DRAINAGE</b>												
Pend Oreille River						Celackum Creek					Lewis River (continued)	
Boyer Mountain	17A2	7	3LN	43E	5250	Celackum Creek, Upper	20222	11	20N	20E	9N 10E	
Bunchgrass Meadow	17A1	24	37N	44E	5000	Celockum Creek, Lower	20232	1	20N	20E	4300	
Winchester Creek	17A3	30	33N	43E	2970	Squilchuck Creek					Divide Meadow	
Kettle River						Squilchuck Creek					Beaver Creek Trail	
Boulder Road	18A2	36	39N	36E	4150	Beehive Springs	20233	12	21N	19E	4400	
Butte Creek	18A3	28	39N	35E	4070	Scout-A-Vista	20234	18	21N	20E	5400	
Cabin Creek	18A8	5	38N	36E	3170	Stemilt Slide					Divine Meadow	
Goat Creek	18A4	26	39N	35E	3595	Upper Wheeler	20235					Brown Top
Snow Caps Creek	18A5	3	38N	36E	2160	Scout-A-Vista					Marble Mountain	
Snow Caps Trail	18A6	5	38N	36E	2720	Stemilt Creek					New Muddy River	
Summit G. 5.	18A7	20	39N	35E	4600	Creston-Kunz					Freezeout Creek Trail	
Baird	17A6	19	36N	42E	3215	Jack Woods	1883m	28	27N	31E	2570	
Carlson	18A9	34	32N	38E	2885	Krause	1884m	21	27N	33E	2420	
Cheekieah	17A4	11	32N	41E	4925	Sheffels	1885m	17	27N	32E	2378	
Stranger Mountain	17A5	26	31N	38E	4990	Sherman	1887m	24	27N	33E	2440	
Togo	18A10	6	29N	38E	3370	Wheatridge	1886m	24	25N	32E	2280	
Clark						Yakima River					Pigtail Peak	
Muckamuck	19A8a	2	36N	23E	7000	Athanum R. S.	21C11	26	12N	14E	3100	
Mutton Creek No. 1	19A1	20	36N	24E	6750	Big Boulder Creek	21B9	35	23N	14E	3200	
Mutton Creek No. 2	19A4	30	37N	24E	5700	Dromey Flat	21C8	25	12N	12E	3500	
Payasen	20A28a	5	40N	18E	4300	Fish Lake	21C56	13	16N	12E	3400	
Rusty Meadow	19A3P	18	35N	24E	4000	Grouse Camp	20B9	25	20N	20E	5370	
Salmon Meadows	19A10a	15	35N	23E	6750	High Creek	20B12	34	19N	20E	4123	
Starvation Mt.	19A6	30	39N	25E	2845	Joe Lake	20B10	17	19N	20E	4200	
Touts Coulee						Tunnel Clle Elium	21B44m	15	20N	14E	2200	
Billy Goat Pass	20A10a	10	38N	20E	6400	Wenatchee	21B47a	7	23N	13E	3327	
Dollar Match	20A29a	8	39N	20E	7000	Wenatchee	20C1	24	17N	16E	5385	
Harriss Pass	20A5a	7	37N	18E	6500	White Pass (East Side)	21C27	1	13N	11E	4624	
Horsehoe Basin	19A5a	15	40N	23E	7000	White Pass (Leach Lake)					Ghost Forest	
Loup Loup						White Pass (Leach Lake)					Longmire	
Cloudy Pass	20B22a	12	31N	15E	6500	White Pass (Leach Lake)					Paradise Park (New)	
Greenwood Flat	20B25a	3	31N	16E	3540	White Pass (Leach Lake)					Stem Glade	
Little Meadows	20B24a	8	31N	16E	5275	White River	21B15	30	18N	11E	6000	
Lyman Lake	20B23a	18	31N	16E	5900	Corral Pass	21C34	4	16N	9E	5800	
Park Creek Flat	20A13a	18	34N	16E	2220	White River Campground	21C34	4	16N	9E	5800	
Park Creek Ridge	20D12a	7	34N	16E	4600	White River Campground	21C34	4	16N	9E	5800	
Petersons	20A16a	3	34N	17E	3730	White River	21B15	18	15N	11E	4500	
Rainy Pass	20A9	21	35N	17E	4780	White River	21B15	18	15N	11E	4500	
Safety Harbor	20B30a	32	31N	20E	6300	White River	21B15	18	15N	11E	4500	
War Creek Pass	20A31a	34	33N	18E	6500	White River	21B15	18	15N	11E	4500	
<b>LOWER COLUMBIA DRAINAGE</b>												
Brief	20819	34	28N	19E	1600	Asotin Creek	17C4	9	8N	40E	5700	
Entiat Meadows	20B33a	28	31N	17E	4800	Spruce Springs					Dungeness River	
Entiat River Trail	20B34a	2	29N	17E	3150	Mill Creek					Morse Creek	
Four Mile Ridge	20B27a	15	28N	19E	7000	Coouse	17C3m	2	9N	35E	3370	
Fox Camp	20A36a	17	30N	18E	6510	Homestead	17C1	11	9N	40E	4030	
Pope Ridge	20B20	22	29N	18E	4300	Martin Springs (Helmers Sm.)	17C2m	25	9N	40E	4400	
Pope Ridge Show Pillow	20B24S	22	29N	18E	6400	White Salmon River					Deer Park	
Pugh Ridge	20A32a	34	30N	18E	6400	White Salmon River					Glacier Creek	
Shady Pass	20A37	20	29N	19E	6200	White Salmon River					Panorama New	
Show Brushy	20A35a	21	30N	17E	3850	White Salmon River					Twin Lakes	
Tommy Creek	20B21a	10	28N	18L	5300	White Salmon River					Three Mile Creek	
Berne-Mill Creek	21B23	7	26N	15E	2925	West Fork Cabin	21C15	23	9N	12E	4500	
Berne-Mill Creek (New)	21B15H	13	26N	14L	3210	White Salmon River					Nooksack River	
Blewett Pass No. 2	20B2	35	22N	17L	4270	White Salmon River					Olympic Peninsula	
Chikwakum G. S.	20B16	4	25N	17L	1810	Wenatchee River					Dungeness River	
Lake Wenatchee	20B5	33	27N	17L	170	White Salmon River					Mores Creek	
Leavenworth R. S.	20B17	1	24N	17L	1127	White Salmon River					Skagit River	
Merritt	20B18	4	26N	16L	2140	White Salmon River					Slagit River	
Stevens Pass	21B1	14	26N	13L	1070	White Salmon River					Skagit River	
Stevens Pass Sand Shed	21B15	12	26N	19L	3700	White Salmon River					Skagit River	
Trough #2	20B25I	10	26N	20L	5310	White Salmon River					Skagit River	
<b>LEHIGH</b>												
Boulder Road	18A2	36	39N	36E	1450	Colockum Creek	20222	11	20N	20E	5600	
Butte Creek	18A3	28	39N	35E	3170	Colockum Creek	20232	1	20N	20E	4300	
Cabin Creek	18A8	5	38N	36E	3170	Colockum Creek	20232	1	20N	20E	4300	
Goat Creek	18A4	26	39N	35E	3595	Colockum Creek	20232	1	20N	20E	4300	
Snow Caps Creek	18A5	3	38N	36E	2160	Colockum Creek	20232	1	20N	20E	4300	
Summit G. 5.	18A7	20	39N	35E	4600	Colockum Creek	20232	1	20N	20E	4300	
Boulder Road	18A2	36	39N	36E	1450	Colockum Creek	20232	1	20N	20E	4300	
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Cabin Creek	18A8	5	38N	36E	3170	Colockum Creek	20					

## WATER SUPPLY OUTLOOK

State of Washington  
February 1, 1973

### SNOW COVER

None of the water sheds in the Upper Columbia Basin have snow packs that closely approach normal, with only one indicating snow cover to be in the 80 to 120% range. Generally speaking, the snow packs this year are the worst for this time of year that we have seen for over ten years. In recent history, in 1963, snow packs were almost as deficient as of February 1 as they are today. In the Upper Columbia Drainage, the Spokane River water shed has the least snow; 32% of last year, 37% of 1971 and 38% of average. The Chelan-Entiat water sheds are the best with the Chelan having a snow cover as of February 1 of 55% of last year, 68% of 1971 and 81% of normal. Along the Lower Columbia, the situation is very grave. Mill Creek, as measured by only two snow courses, has a snow pack that is 78% below normal. The situation improves to the west, but only slightly. The White Salmon River drainage has a snow pack that is 48% below normal. The Puget Sound Drainage generally improves from south to north with a deficient pocket in the Green-Snoqualmie areas. Skagit, having the best snow cover in the state as of February 1, was 43% of last year at this time, 47% of the previous year and 83% of normal. On the Olympic Peninsula, the snow pack is 49% of last year and 73% of average.



## RESERVOIRS

In spite of this poor water supply outlook in the snow field, the reservoirs have good amounts of water in storage as of February 1. Most have greater than normal amounts for this time of year. Subsequent precipitation, in the form of snow at higher elevations and rainfall in the valleys, will determine how and if these reservoirs will fill with the spring runoff. Even with expected inflows, there is a possibility of all the irrigation reservoirs not filling.

## PRECIPITATION

As reported by the National Weather Service, fall precipitation in the Canadian portion of the basin was 7% greater than normal, but winter precipitation to date has been only 75%. In the Pend Oreille-Spokane drainage, fall precipitation was 31% below normal and to date this winter, 16% below. Along the eastern boundary of Washington, fall precipitation was generally 10% below normal and 15% so far this winter - in the central area, 25% and 20% for the fall and winter periods. West of the Cascades, precipitation has been fairly consistent at 15% below normal.

## STREAMFLOW

In spite of the below normal precipitation, river flows during January were above normal on the Columbia River at Birchbank, The Dalles and the Yakima River at Keona. The rest of the streams were slightly below normal, ranging down to the Okanogan, as measured at Tonasket, at 48% below normal. Forecasts of streamflows will not be made until the March 1 Water Supply Outlook.



COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about February 1, 1973, as percent of the same date in 1972 and 1971 and average of record.

Tributary Basin	No. of Courses Average	1973 Snow Water Expressed as percent of		
		1972	1971	1953-67 Avg.
<u>UPPER COLUMBIA BASIN</u>				
Pend Oreille	7 - 10	58	56	69
Kettle	12 - 14	53	53	60
Colville	5	56	48	58
Spokane	2 - 3	32	37	38
Okanogan	26 - 32	42	50	64
Methow	8 - 9	47	52	75
Chelan	8 - 10	55	68	81
Entiat	1 - 8	55	54	79
Wenatchee	8 - 9	33	40	61
Yakima	18 - 22	32	39	64
Ahtanum	1	37	45	70
<u>LOWER COLUMBIA</u>				
Mill Creek	2	8	16	22
Klickitat	1	22	19	38
White Salmon	2	26	28	52
Lewis	17 - 18	23	25	49
Cowlitz	10	26	30	52
<u>PUGET SOUND</u>				
Nisqually	4	29	34	59
White	1	43	43	69
Green	5 - 10	22	28	49
Snoqualmie	1	24	30	48
Skykomish	1 - 2	43	48	76
Skagit	6 - 15	43	47	83
Nooksack	1	50	49	-
<u>OLYMPIC PENINSULA</u>				
Skokomish	4	50	47	70
Elwha	1	44	49	67
Dungeness	1	54	61	82



## RESERVOIR STORAGE - 1000 Feet

BASIN or STREAM	RESERVOIR	USABLE CAPACITY	(February)			
			1973	1972	1971	Normal*
<u>COLUMBIA</u>						
Spokane	Coeur d'Alene Lake	225.1	153.3	147.3	202.5	137.0
Columbia	Franklin D. Roosevelt Lake	5232.0	4937.1	4420.2	5065.6	3812.5
Columbia	Banks Lake	761.8	610.7	714.9	712.2	494.0
Okanogan	Conconully Reservoir	13.0	10.8	9.1	5.3	5.6
Okanogan	Salmon Lake	10.5	9.5	8.6	2.1	8.6
Chelan	Lake Chelan	676.1	237.1	190.4	216.3	318.4
<u>YAKIMA</u>						
Yakima	Keechelus Lake	157.8	98.6	137.2	97.3	92.1
Kaches	Kachess Lake	239.0	193.0	156.5	175.3	172.2
Cle Elum	Lake Cle Elum	436.9	315.9	277.1	170.1	241.1
Bumping	Bumping Lake	33.7	6.7	5.0	5.3	9.9
Tieton	Rimrock Lake	198.0	143.1	146.7	86.2	111.3
<u>PUGET SOUND</u>						
Skagit	Ross Reservoir	1202.0	997.3	822.1	895.4	956.3
Skagit	Diablo Reservoir	90.6	83.4	83.9	84.4	85.6
Skagit	Gorge Reservoir	9.8	8.2	7.8	7.9	-

1/ Based on Active Storage

\* 15-year average 1953-67



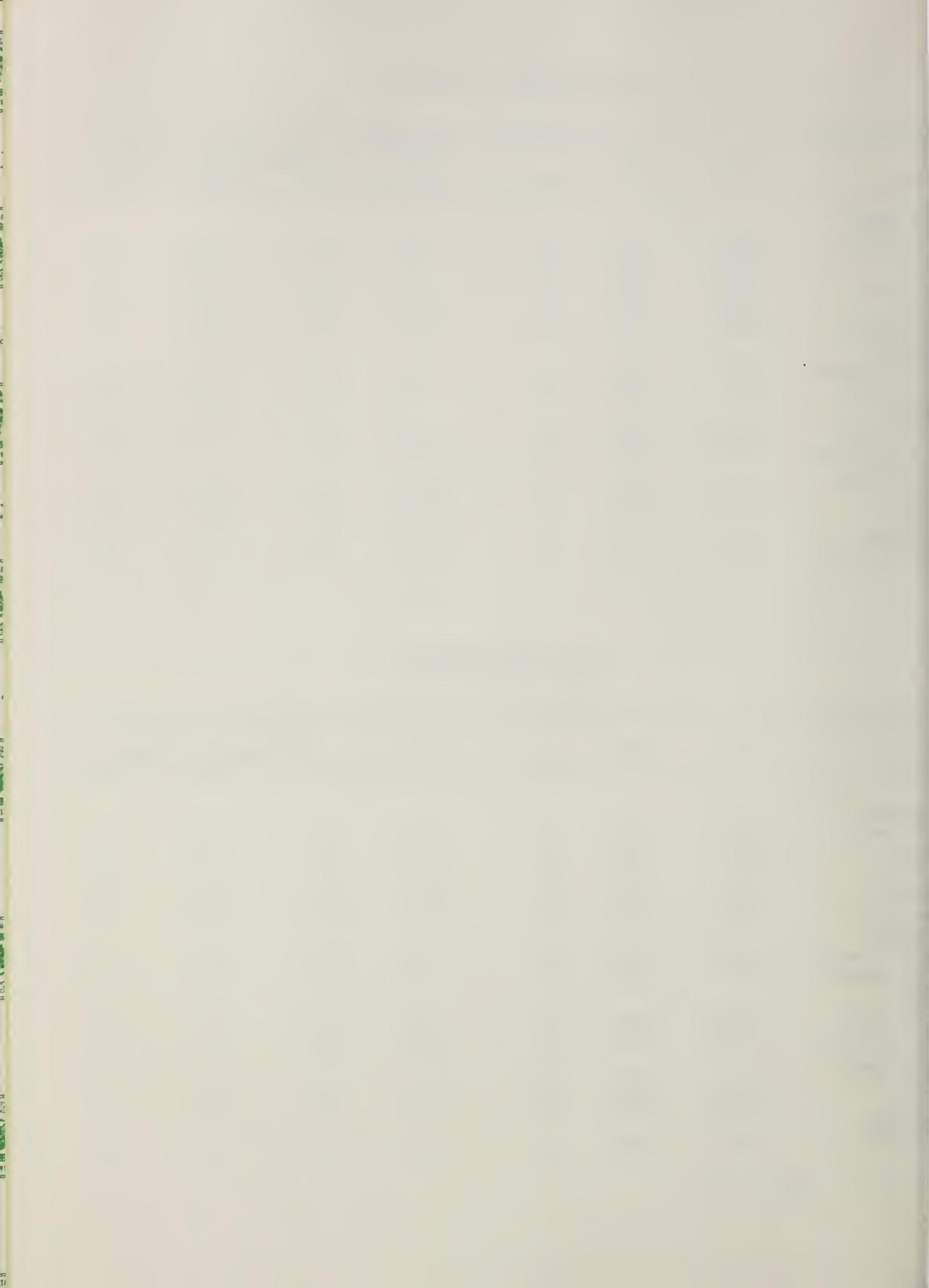
**SOIL MOISTURE - FEBRUARY**

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches):		Soil Moisture Content		
				Total Capacity:	1973	(Inches) as of Feb. 1	1972	1971
<b>CRAB CREEK</b>								
Jack Woods	18B3m	2750	48	13.6	7.7	8.0	8.9	
Krause	18B4m	2420	48	13.6	7.0	5.6	4.9	
Sheffels	18B5m	2380	48	13.6	7.9	7.7	5.7	
Sherman	18B7m	2440	48	13.6	6.7	6.4	5.5	
Wheatridge	18B6m	2290	48	13.6	6.2	8.1	8.9	
<b>OKANOGAN</b>								
Salmon Meadows	19A2M	4500	48	5.4	2.4	3.6	2.6	
Trout Creek	3-M	2600	48	7.3	3.4	4.0	3.3	
<b>YAKIMA</b>								
Domery Flat	21B20m	2200	48	6.9	6.6	--	4.9	
Lake Cle Elum	21B14M	2200	48	12.8	6.9	--	9.2	
<b>WALLA WALLA</b>								
Couse	17C3m	3650	48	11.1	7.3	10.5	10.6	
Helmers	17C2M	4400	48	12.0	10.7	10.6	10.9	
<b>WENATCHEE</b>								
Upper Wheeler	20B7M	4400	48	12.7	8.9	9.0	10.3	

**FALL SOIL MOISTURE**

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches):		Soil Moisture Content		
				Total Capacity:	1972	(Inches) as of Oct. 1	1971	1970
<b>CRAB CREEK</b>								
Jack Woods	18B3m	2750	48	13.6	5.6	5.3	7.0	
Krause	18B4m	2420	48	13.6	6.2	5.0	4.4	
Sheffels	18B5m	2380	48	13.6	6.5	5.3	4.4	
Sherman	18B7m	2440	48	13.6	4.6	4.0	3.8	
Wheatridge	18B6m	2290	48	13.6	6.2	5.5	7.8	
<b>OKANOGAN</b>								
Salmon Meadows	19A02M	4500	48	5.4	2.8	2.7	1.7	
Trout Creek	3-M	3600	48	7.3	3.3	3.3	3.4*	
<b>YAKIMA</b>								
Domery Flat	21B20m	2200	48	6.9	4.1	2.1	2.4	
Lake Cle Elum	21B14M	2200	48	12.8	8.7	7.1	7.6	
<b>WALLA WALLA</b>								
Couse	17C3m	3650	48	11.1	6.0	6.2	5.9	
Helmers	17C2M	4400	48	12.0	7.7	8.2	7.3	
<b>WENATCHEE</b>								
Upper Wheeler	20B7M	4400	48	12.7	5.7	6.5	5.1	

\* November 1 measurement



## PRECIPITATION 1/

## Division Averages and Departures

Drainage Divisions	FALL			WINTER		
	Sept-Oct Average	1972 Departure	2/	Nov-Dec 1972 Average	Jan 1973 Departure	2/
Columbia in Canada	4.15	+0.26		6.76		-2.30
Pend Oreille -Spokane	2.68	-1.20		10.50		-1.97
Northeastern Washington	2.16	-0.09		6.34		-1.40
Southeastern Washington	2.35	-0.30		7.40		-1.02
Central Washington	3.48	-0.96		17.67		-2.02
North Central Washington	1.04	-0.37		3.09		-1.49
Northwest Slope Cascades	10.41	-1.26		29.92		-5.71
Southwest Slope Cascades	6.56	-1.16		24.01		-4.14

## Northeastern Washington

- Lower Spokane, Colville, Sanpoil and lower Kettle drainages.

## Southeastern Washington

- Touchet, Tucannon and Palouse drainages.

## Central Washington

- Yakima, Wenatchee and Chelan drainages.

## North Central Washington

#### - Methow and Okanogan drainages.

## **Northwest Slope Cascades**

#### - Puget Sound drainages.

## **Southwest Slope Cascades**

- Lower Columbia drainages.

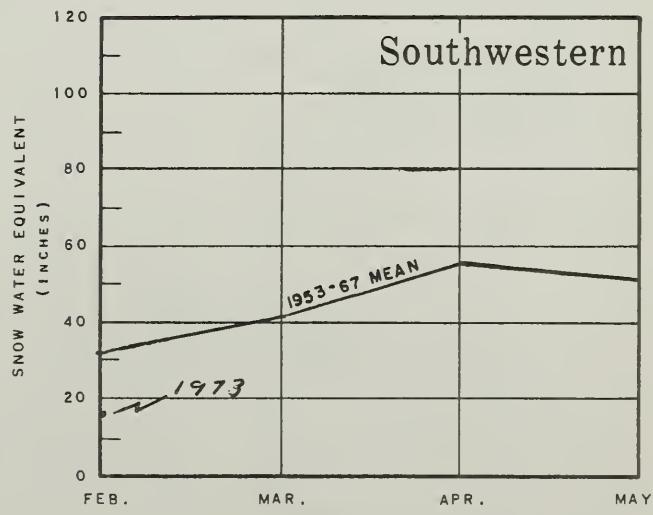
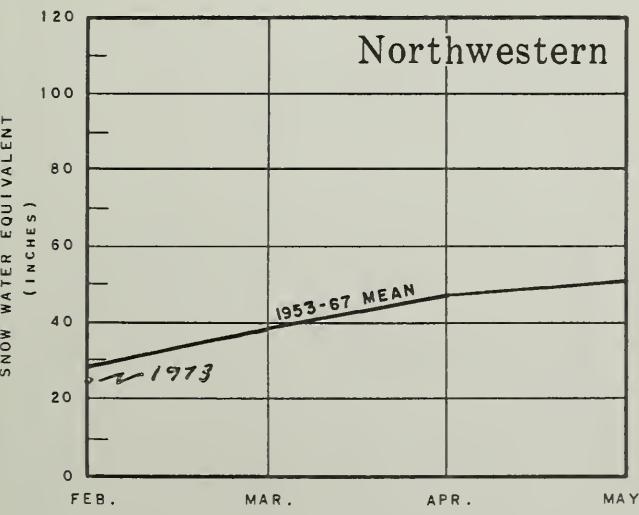
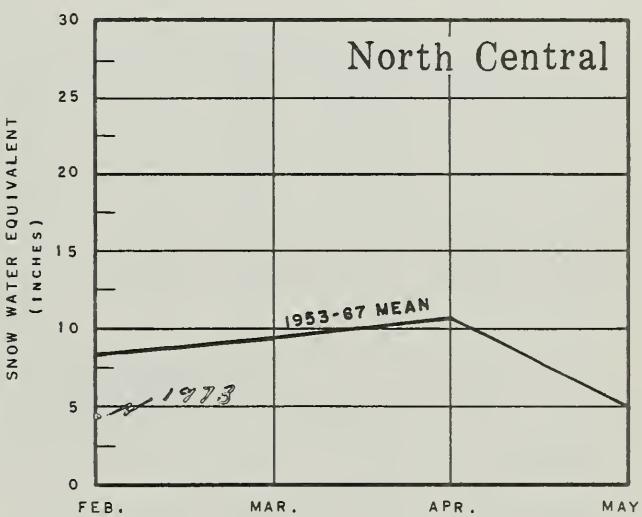
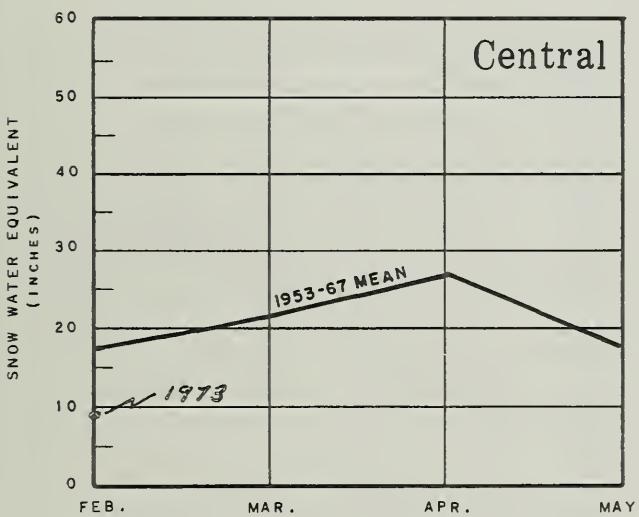
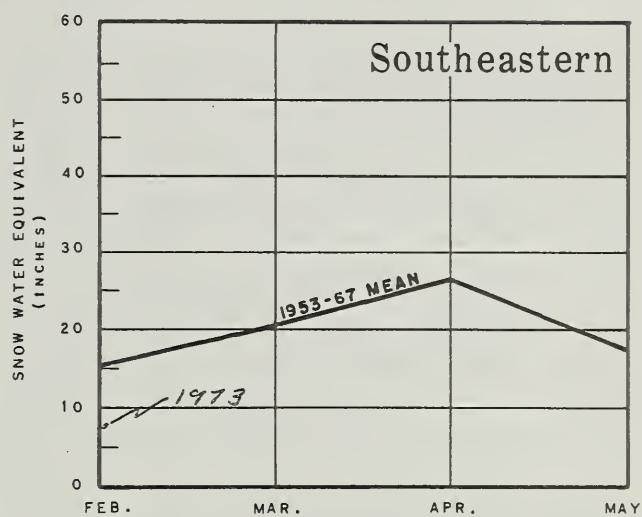
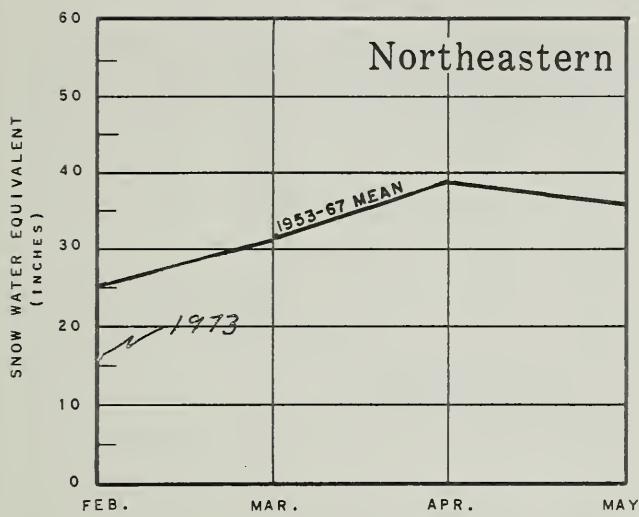
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and National Weather Service.

2/ - Departure from 15-year (1953-67) drainage division average.



# WASHINGTON SNOW COVER

## DRAINAGE AREAS

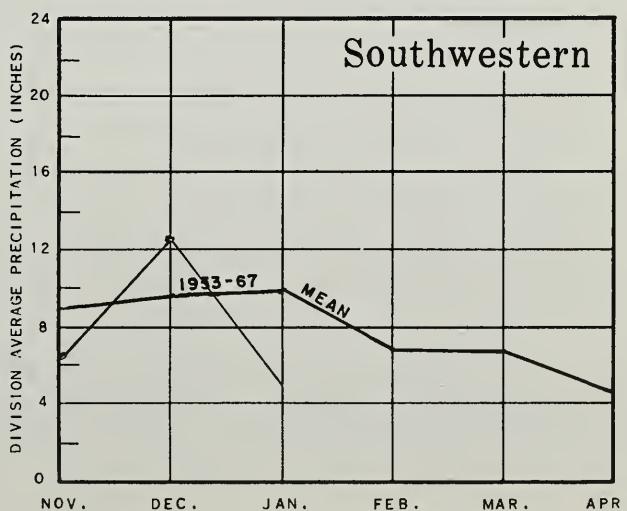
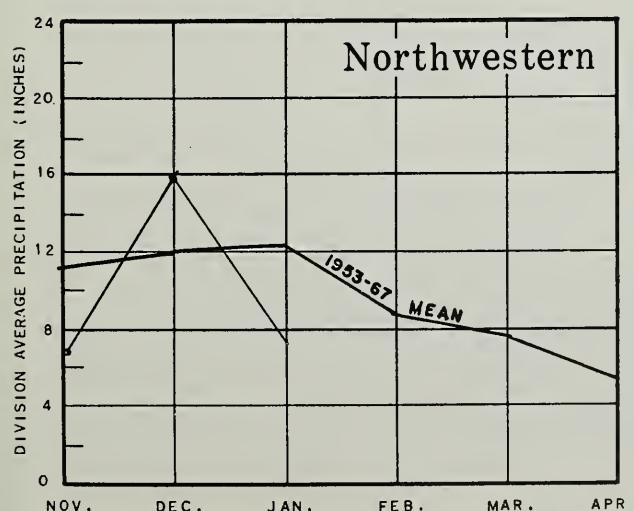
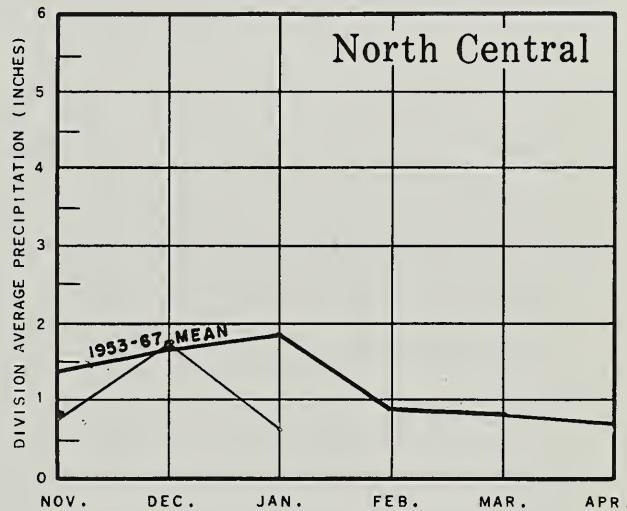
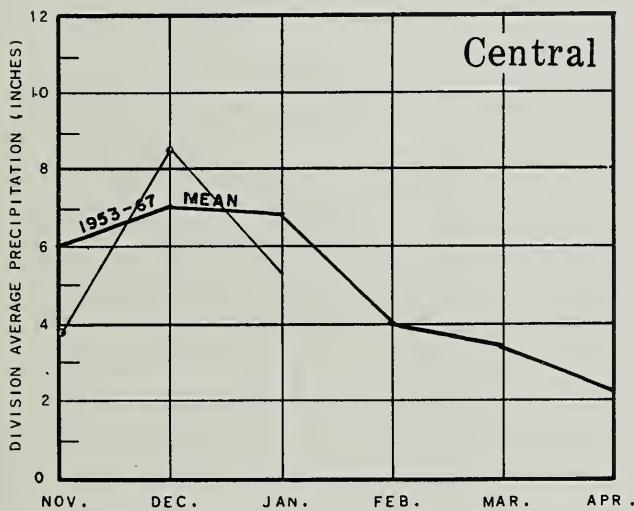
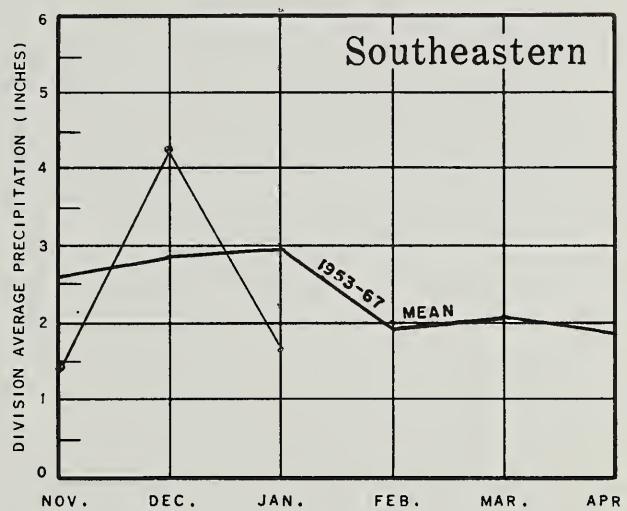
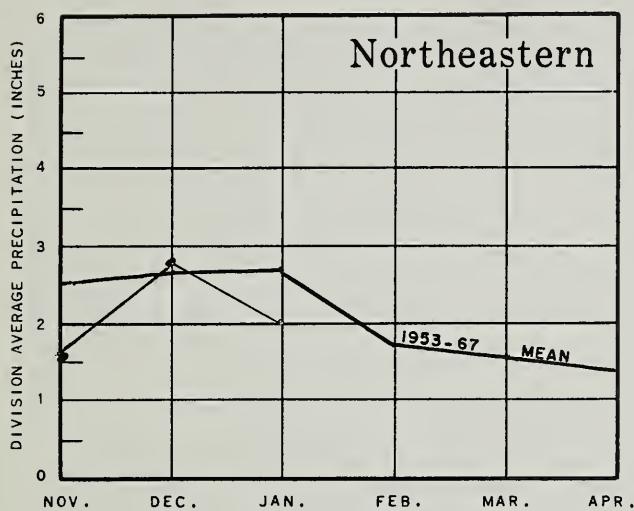




# WASHINGTON VALLEY PRECIPITATION

1972-1973

## DRAINAGE AREAS

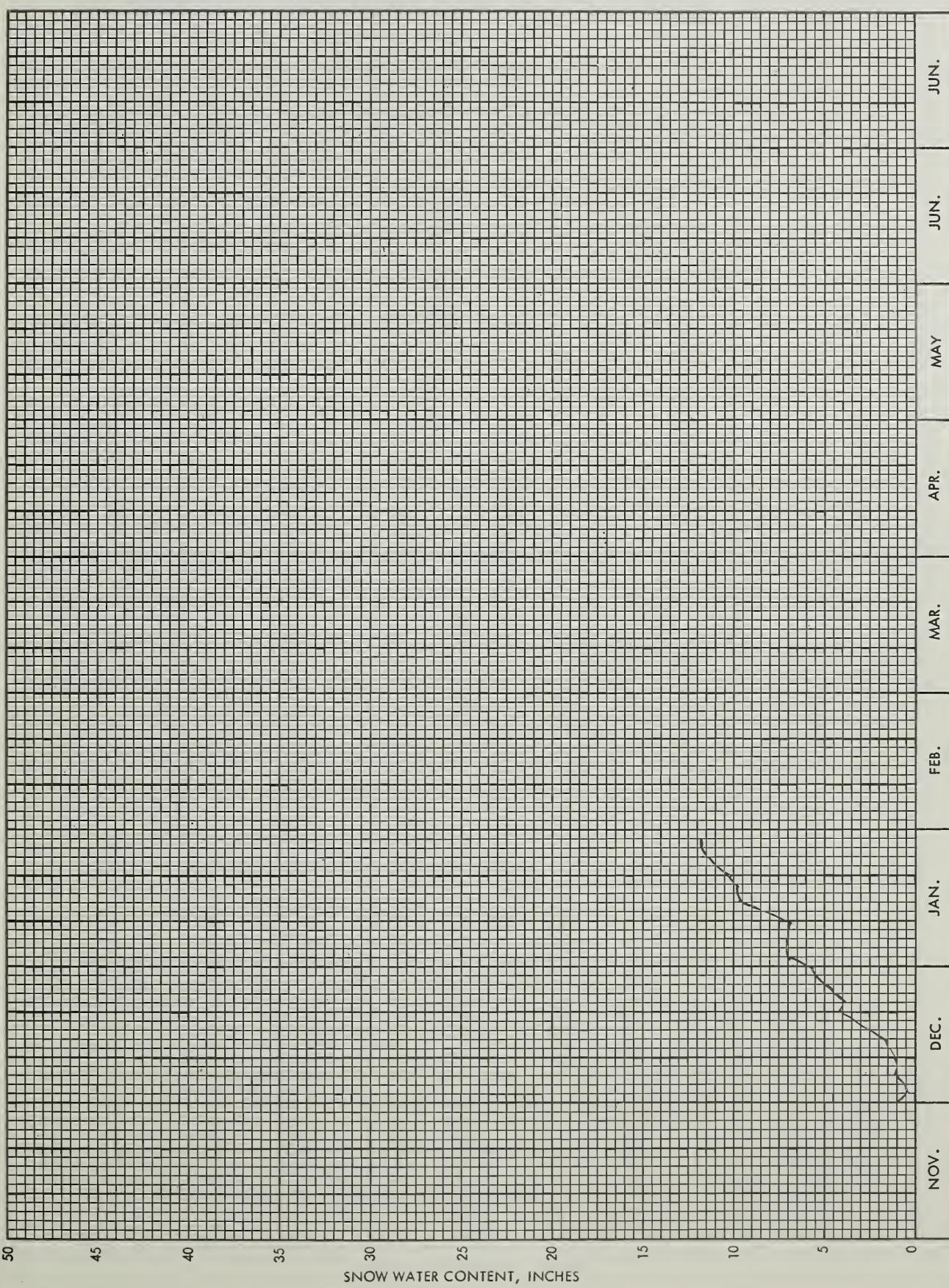




## SNOW PILLOW DATA

Berne-Mill Creek

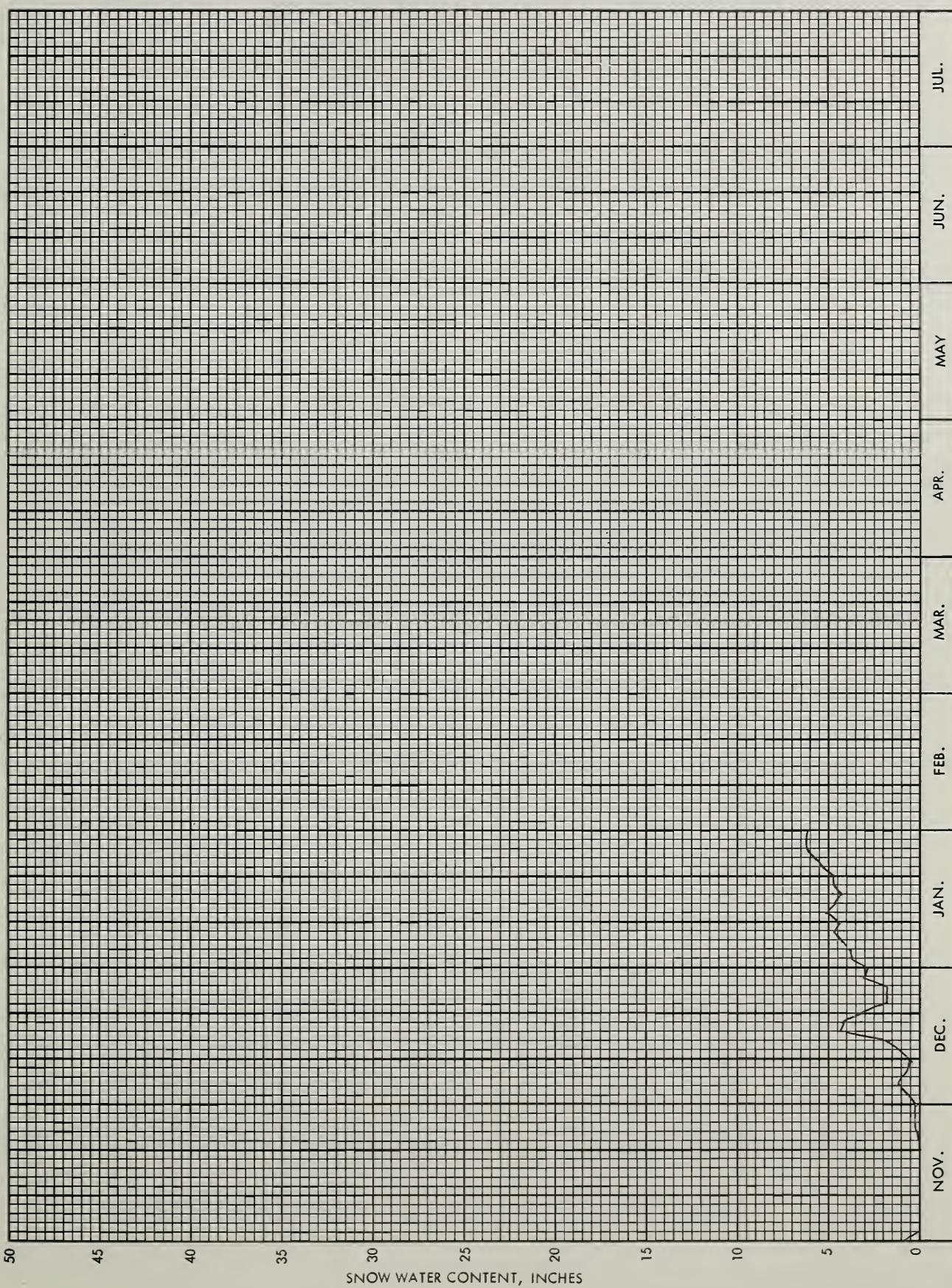
1972-73

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.Lat. 47° 45' Long. 121° 42' Elev. 3240



SNOW PILLOW DATA  
Cougar Mountain - FS  
1972 - 1973

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River  
Lat. 47° 17' Long. 121° 40' Elev. 3200'



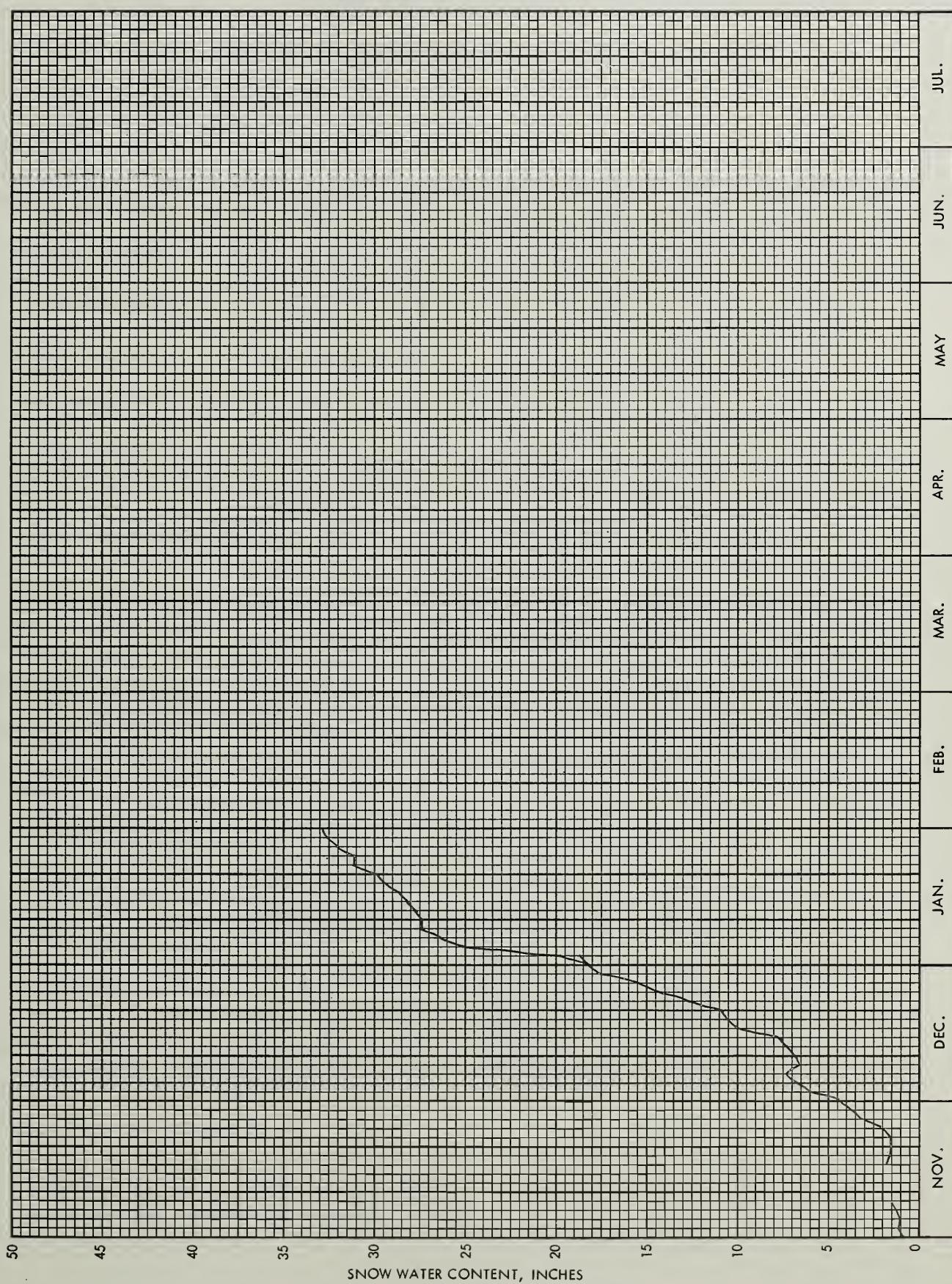


## SNOW PILLOW DATA

Snowshoe butte - FS

1972 - 1973

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat.  $47^{\circ} 13'$  Long.  $121^{\circ} 22'$  Elev. 5000'



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 1

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #

UPPER COLUMBIA DRAINAGEPEND OREILLE RIVER

Benton Meadow	16A02	2344	12/27	0	0.0	3.8	3.2
			1/30	13	1.8	5.0	5.1
Benton Spring	16A03	4900	12/27	24	5.8	11.1	8.6
			1/31	38	11.5	18.0	14.0
Boyer Mountain	17A02	5250	Not Measured			14.4	-
Chewelah	17A04	4925	1/27	35	9.0	11.0	13.2
Heart Lake Trail	14C10	4800	1/3	19	3.8	15.2	-
			1/30	28	7.2	29.6	-
Hoodoo Basin	15C10	6000	1/3	65	18.1	28.5	19.8
			1/30	85	28.8	52.2	-
Hoodoo Creek	15C01	5900	1/3	64	17.1	27.5	18.0
			1/30	81	26.4	51.5	32.0
Lookout	15B02	5250	12/29	42	10.5	19.4	15.7
			1/31	53	16.7	39.3	25.0
Nelson	19-Canada	3050	10/31	8	0.9	-	-
			11/14	3	0.8	2.7	-
			11/29	10	1.6	-	-
			12/14	11	1.8	5.0	-
			12/29	19	4.6	10.2	-
			1/12	27	6.0	13.7	-
			1/31	36	9.6	15.0	11.4*
Schweitzer Bowl	16A06	4500	12/27	44	9.7	18.8	-
			1/30	61	17.2	28.8	-
Schweitzer Ridge	16A05	6100	12/27	58	15.3	26.7	-
			1/30	83	26.3	40.0	-
Winchester Creek	17A03	2970	1/26	21	6.0	9.2	9.2

KETTLE RIVER

Barnes Creek	90-Canada	5300	1/30	43	10.8	19.2	-
Big White Mtn	154-Canada	5500	1/30	39	15.4	15.4	-
Boulder Road	18A02	1450	12/27	0	0.0	3.4	2.1
			1/29	6	1.1	4.3	4.1
Butte Creek	18A03	4070	12/27	17	3.0	3.9	4.3
			1/29	26	5.4	8.4	6.6
Cabin Creek	18A08	3170	12/27	0	0.0	4.3	4.2
			1/29	18	3.7	7.2	6.0
Carmi	126-Canada	4100	1/30	14	2.2	7.6	5.6*

# Average based on 1953-67 average

\* Average for years of record



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 2

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	Last Year
						Average #	

KETTLE RIVER (Cont.)

Farron # 1	17-Canada	4000	1/30	32	8.0	11.6	9.7*
Farron # 2	243-Canada	4000	1/30	33	7.8	New Course	
Goat Creek	18A04	3595	12/27	12	2.1	3.6	3.7
			1/29	20	4.0	7.0	5.5
Graystoke Lake	5-Canada	5950	1/27	40	11.7	-	-
Monashee Pass	48A-Canada	4500	12/28	48	6.0	9.3	
			1/30	33	8.3	13.8	9.8*
Old Glory Mountain	42-Canada	7000	1/29	66	19.5	20.5	18.7*
Snow Caps Creek	18A05	2150	12/27	0	0.0	3.5	2.3
			1/29	8	1.5	5.0	4.3
Snow Caps Trail	18A06	2720	12/27	0	0.0	4.1	3.0
			1/29	13	2.1	6.9	4.9
Summit G. S.	18A07	4600	12/27	15	2.7	-	4.3
			1/29	23	4.7	-	6.7
Trapping Creek Lower	166-Can	3050	1/30	11	1.2	6.8	4.8*
Trapping Creek Upper	165-Can	4450	1/30	25	6.0	9.8	7.6*

COLVILLE RIVER

Baird	17A6	3215	1/28	20	4.4	7.2	5.9
Carlson	18A9	2885	1/27	7	1.0	3.7	4.3
Chewelah	17A4	4925	1/27	35	9.0	11.0	13.2
Stranger Mountain	17A5	4990	1/27	29	7.1	10.2	9.8
Togo	18A10	3370	1/27	17	4.3	10.8	8.6

SPOKANE RIVER

4Th of July Summit	16B3	3100	12/29	0	0.0	9.8	3.5
			1/30	7	0.6	12.2	6.4
Sherwin	16C1	3200	12/22	6	1.3	11.4	-
			1/30	15	4.4	18.1	10.4
Lookout	15B02	5250	12/29	42	10.5	19.4	15.7
			1/31	53	16.7	39.3	25.0
Above Burke	15B8	4100	1/31	30	9.0	18.6	-
Copper Ridge	16E2	4800	1/30	30	9.2	-	-

OKANOGAN RIVER

Aberdeen Lake	6-Canada	4300	2/1	16	3.3	6.6	5.1*
Blackwall Peak	100-Canada	6250	12/29	64	15.4	21.2	-
			2/1	61	19.7	39.4	25.7*
Bouleau Lake	234-Canada	4580	12/31	31	4.8	13.8	-
			1/28	34	3.3	15.6	-
Brenda Mine	193-Canada	4800	1/26	29	7.7	15.2	10.5*

# Average based on 1953-67 average

\* Average for years of record



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 3

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
<u>OKANOGAN RIVER (Cont.)</u>							
Brookmere	27-Canada	3200	1/29	17	2.9	9.6	7.3*
Carrs Landing Lower	167-Can	2250	12/30	2	0.2	3.4	-
			1/28	0	0.0	4.8	2.6*
Carrs Landing Upper	168-Can	3200	12/30	3	0.3	4.4	-
			1/28	7	1.1	5.4	4.3*
Clark +	19A8a	7000	Not Measured			-	-
Enderby	130-Can	4300	1/29	75	23.6	29.1	24.8*
Esperon Creek Lower	164-Can	4400	1/28	25	6.2	-	-
Esperon Creek Middle	163-Can	4700	1/28	34	6.9	-	-
Esperon Creek Upper	162-Can	5400	1/28	31	7.8	-	-
Freezeout Meadows New	20A38	5000	1/28	61	17.4	New Course	
Graystoke Lake	5-Can	5950	1/27	40	11.7	-	-
Hamilton Hill	107-Can	4900	Late Report				10.6*
Harts Pass	20A05A	6500	1/28	89	25.9	44.3	28.2
Horseshoe Basin +	19A05a	7000	1/30	30	8.1	19.1	9.7
Isonotok Lake	152-Can	6300	12/28	16	3.0	7.7	-
			1/27	18	4.0	12.1	6.5*
Lost Horse Mtn	105-Can	6300	1/30	22	4.8	13.2	6.9*
Loup Loup	19A07	4650	1/31	24	5.2	10.9	6.6
McCulloch	4-Can	4200	12/28	14	2.2	5.0	-
Missizula Mtn.	106-Can	5100	Late Report				6.5*
Mission Creek	5A-Can	6000	12/28	38	7.8	13.4	-
			1/29	37	10.3	18.3	13.8*
Monahsee Pass	48A-Can	4500	12/28	48	6.0	9.3	-
			1/30	33	8.3	13.8	9.8*
Mount Kobau	156-Can	5950	2/1	22	5.0	13.3	11.5*
Muckamuck +	19A09a	6390	Not Measured			-	-
Mutton Creek No. 1	19A01	5700	1/29	31	7.4	18.7	9.7
Mutton Creek No. 2	19A04	6000	1/29	29	7.4	16.7	10.1
Mutton Creek No. 2SP	19A11SP	6000	1/29	-	5.2	New Installation	
New Copper Mtn.	46A-Can	4300	1/25	13	2.0	10.9	5.7*
New Penticton Res. #2	183-Can	5225	1/28	19	2.8	10.6	-
Oyama Lake	203-Can	4400	1/29	18	4.3	7.6	6.1*
Paysayten +	20A28a	4300	1/30	30	9.0	-	11.6
Postill Lake	55-Can	4500	1/30	20	4.1	8.5	10.0*
Rusty Creek	19A03	4000	1/30	16	3.2	8.0	5.6
Salmon Meadows	19A02	4500	1/29	23	4.6	12.1	7.3
Silver Star Mountain	99-Can	6050	1/2	50	13.0	19.8	-
			1/28	51	15.3	27.5	19.0*
Starvation Mountain +	19A10a	6750	Not Measured			-	-
Summerland Reservoir	3A-Can	4200	12/29	15	2.8	7.8	-
			1/28	20	4.5	12.1	8.1*

# Average based on 1953-67 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 4

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	Last Year
NAME	Number	Elevation					Average #
<u>OKANOGAN RIVER (Cont.)</u>							
Touts Coulee	19A06	2845	1/30	5	1.0	5.4	3.1
Trout Creek	3-Can	4700	1/26	19	3.5	11.5	5.2*
Vaseux Creek	233-Can	4600	12/29	12	1.8	3.9	-
						8.2	-
White Rocks Mtn.	70-Can	6000	1/30	43	12.2	21.8	-
Dollar Watch +	20A29a	7000	1/30	54	14.6	24.8	18.4
Harts Pass	20A05A	6500	1/28	89	25.9	44.3	28.2
Horseshoe Basin +	19A05A	7000	1/30	30	8.1	19.1	9.7
Loup Loup	19A07	4650	1/31	24	5.2	10.9	6.6
Mutton Creek No. 1	19A01	5700	1/29	31	7.4	18.7	9.7
Mutton Creek No. 2	19A04	6000	1/29	29	7.4	16.7	10.1
Rusty Creek	19A03	4000	1/30	16	3.2	8.0	5.6
Salmon Meadows	19A02	4500	1/29	23	4.6	12.1	7.3
War Creek Pass +	20A31a	6500	1/30	84	23.5	41.2	-
<u>CHELAN LAKE BASIN</u>							
Cloudy Pass +	20A22a	6500	1/30	74	22.2	40.3	29.4
Greenwood Flat +	20A25a	3540	1/30	51	15.3	-	21.6
Little Meadows +	20A24a	5275	1/30	74	22.2	38.9	29.9
Lyman Lake +	20A23A	5900	1/30	130	39.0	-	38.9
Park Creek Flat +	20A13a	2220	1/30	65	19.5	35.0	27.8
Park Creek Ridge	20A12A	4600	1/30	95	28.5	61.0	35.3
Petersons +	20A16a	3730	1/30	72	21.6	39.6	26.2
Rainy Pass	20A09	3730	1/27	88	26.0	43.8	27.5
Safety Harbor +	20A30A	6300	1/30	57	15.4	29.7	-
War Creek Pass +	20A31a	6500	1/30	84	23.5	41.2	-
<u>ENTIAT RIVER</u>							
Blue Creek G. S.	20B28a	4800	1/29	78	24.5	New Aerial	
Entiat Meadows +	20A33a	4800	1/29	84	26.4	48.3	-
Entiat River Trail +	20A34a	3150	1/29	34	9.9	26.7	-
Four Mile Ridge +	20B27a	7000	1/29	64	20.1	34.6	-
Fox Camp +	20A36a	6510	1/29	104	32.6	49.6	-
Pope Ridge	20B20	4300	1/30	39	11.5	22.7	14.5
Pugh Ridge	20A32a	6400	1/29	73	22.9	37.2	-
Shady Pass	20A37	6200	1/31	59	18.5	-	-
Snow Brushy +	20A35a	3850	1/29	73	22.9	34.7	-
Tommy Creek +	20B21a	5300	1/29	46	14.4	29.3	-

# Average based on 1953-67 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 5

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE				THIS YEAR			PAST RECORD		
	NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year	Average #
							Last Year		
<b>WENATCHEE RIVER</b>									
Berne-Mill Creek	21B23	2925		11/29	7	1.4	4.9	4.8	
				12/14	15	2.3	13.8	7.3	
				12/27	23	6.9	16.7	11.4	
				1/15	38	11.8	28.1	17.1	
				1/29	46	13.9	36.2	20.7	
Berne-Mill Creek New	21B41SP	3240		11/29	6	1.0	3.8	-	
				12/27	17	4.7	17.9	10.9	
				1/29	37	10.9	28.6	19.6	
Blewett Pass No. 2	20B02	4270		12/28	17	4.7	13.5	6.3	
				1/30	21	5.4	27.7	11.2	
Chiwaukum G. S.	20B16	1810		12/14	6	0.5	7.6	2.7	
				12/27	7	2.0	10.4	4.6	
				1/15	14	3.6	14.0	7.5	
				1/29	19	4.1	16.6	9.0	
Lake Wenatchee	20B05	1970		11/29	3	1.2	1.7	-	
				12/14	8	0.6	8.4	3.7	
				12/27	8	2.6	11.3	5.8	
				1/15	22	4.9	15.3	9.6	
				1/29	24	5.4	20.4	12.0	
Leavenworth R. S.	20B17	1127		12/11	2	0.5	4.9	-	
				1/1	No Report		6.9	2.9	
				1/12	10	1.9	7.8	4.0	
				1/31	9	3.3	10.9	5.0	
Lyman Lake + Merritt	20A23A	5900		1/30	130	39.0	-	38.9	
	20B18	2140		11/29	3	0.6	1.8	2.9	
				12/14	9	0.5	9.8	4.6	
				12/27	8	2.8	12.0	8.0	
				1/15	23	5.2	17.8	12.0	
				1/29	29	6.7	23.0	14.1	
Stevens Pass	21B01	4070		10/31	8	1.1	2.4	-	
				11/14	13	2.9	6.3	-	
				11/29	24	6.0	10.6	10.0	
				12/14	39	8.4	21.2	14.7	
				12/27	52	15.4	30.3	20.8	
				1/15	64	21.8	46.0	26.6	
				1/29	78	26.0	60.1	34.4	
Stevens Pass Sand Shed	21B45	3700		11/29	12	2.5	5.6	-	
				12/14	20	3.5	14.6	-	
				12/27	35	9.1	21.1	-	
				1/15	46	14.6	32.9	-	
				1/29	54	18.4	42.7	-	

# Average based on 1953-67 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 6

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
<u>COLOCKUM CREEK</u>							
Colockum Creek Upper	20B22	5300	2/1	26	8.3	19.2	-
Colockum Creek Lower	20B23	4300	2/1	22	6.0	14.5	-
<u>SQUILCHUCK CREEK</u>							
Beehive Springs	20B03	4400	1/31	16	5.3	12.5	5.1
Scout-A-Vista	20B04	3400	1/31	19	5.8	12.2	5.4
<u>STEMILT CREEK</u>							
Jump-Off	20B08	4450	1/31	20	6.0	15.0	4.8
Stemilt Slide	20B06	5000	1/31	36	10.0	20.1	10.0
Upper Wheeler	20B07	4400	1/31	17	6.0	17.1	6.5
<u>YAKIMA RIVER</u>							
Ahtanum R. S.	21C11	3100	12/27	6	1.5	6.2	3.2
			1/26	12	4.0	10.7	5.7
Blewett Pass No. 2	20B02	4270	12/28	17	4.7	13.5	6.3
			1/30	21	5.4	27.7	11.2
Bumping Lake Old	21C08	3450	1/2	13	3.6	9.2	6.6
			1/18	21	6.6	14.6	10.6
			1/31	28	8.0	18.9	12.3
Bumping Lake New	21C36	3400	1/2	14	4.1	11.8	-
			1/18	27	9.1	18.4	12.4
			1/31	29	7.0	24.9	14.9
Cayuse Pass	21C06	5300	12/29	78	23.8	51.2	34.3
			2/1	106	38.9	89.8	56.3
Colockum Pass	20B09	5370	1/31	39	10.6	19.7	10.5
Cooke Creek	20B10	4123	1/31	11	3.4	13.0	5.0
Grouse Camp	20B11	5385	1/30	37	10.0	22.2	12.2
High Creek	20B12	2930	1/30	13	3.0	13.1	4.6
Joe Lake +	21B46a	4624	11/23	72	18.0	70.0	-
Green Lake	21C10	6000	1/29	58	18.2	-	-
Lake Cle Elum	21B14M	2200	10/31	0	0.0	1.9	-
			11/14	0	0.0	0.0	-
			12/14	12	1.0	6.4	1.7
			12/29	0	0.0	7.6	3.9
			1/11	10	1.6	14.5	5.9
			1/29	13	3.6	18.4	7.8
Lemah Creek +	21B47a	3327	1/23	57	14.2	48.0	-
Manashtash	20C01	3935	1/29	10	2.4	8.8	3.4
Morse Lake	21C17	5400	1/29	92	34.2	63.3	39.7
Nanum	20B13	3875	1/30	19	4.5	15.0	6.9

# Average based on 1953-67 average

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 7

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
						Average #	

YAKIMA RIVER (Cont.)

Olallie Meadows	21B2	3625	2/1	44	14.6	59.7	30.2
Satus Pass	20D01	4030	1/31	12	3.1	13.8	8.1
Stampede Pass Pillow	21B10	3860	1/1	-	11.5	16.6	16.9
			1/18	-	14.8	38.6	21.4
			2/1	-	18.5	50.0	28.8
Trail Creek	20B14	3360	1/31	0	0.0	8.9	-
Tunnel Avenue	21B08	2450	10/31	0	0.0	1.8	-
			11/14	0	0.0	0.0	-
			12/14	16	1.0	11.3	5.5
			12/29	15	4.5	13.5	8.6
			1/11	25	6.4	20.4	13.1
			1/29	37	9.6	27.9	17.0
Van Epps Pass +	20B26a	5925	1/23	77	19.2	61.4	-
Walters Flat	20B15	3360	1/30	12	3.9	13.8	5.9
Waptus Lake +	21B49a	3024	1/23	63	15.8	53.8	-
White Pass (E. Side)	21C28	4500	1/4	22	5.7	17.3	11.1
			1/17	27	8.1	-	13.7
			1/30	29	9.1	40.9	16.7
White Pass (L. Lake)	21C27	4500	1/30	30	9.4	46.9	20.6

AHTANUM CREEK

Ahtanum R. S.	21C11	3100	12/27	6	1.5	6.2	3.2
			1/26	12	4.0	10.7	5.7

Green Lake      21C10      6000      1/29      58      18.2      -      -

LOWER COLUMBIA DRAINAGEASOTIN CREEK

Spruce Springs	17C4	5700	1/29	31	9.4	27.6	-
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MILL CREEK

Homestead	17C1	4030	1/31	6	1.2	14.4	5.5
Martin Springs	17C02	4400	1/30	8	1.8	19.9	8.4

KLICKITAT RIVER

Satus Pass	20D1	4030	1/31	12	3.1	13.8	8.1
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WHITE SALMON RIVER

Cultus Creek	21C12	4000	1/3	34	10.3	29.7	15.4
			1/29	54	16.4	54.4	29.4
Surprise Lakes	21C13A	4250	1/3	36	10.8	35.0	18.5
			1/29	49	15.8	66.8	32.7

# Average based on 1953-67 average

+ Snow water equivalent estimated from aerial stadia observation



SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 8

SNOW

SNOW	THIS YEAR			PAST RECORD	
	DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)
NAME	Number	Elevation	Last Year	Average	#

## WIND RIVER

Old Man Pass      21D19    3100    12/29    2    0.8    12.9    4.1  
                        2/1        24        5.0        26.8    12.5

## LEWIS RIVER

Blue Lake +	21C22a	4800	1/3	88	25.5	51.0	30.1
			1/29	108	34.6	92.5	56.0
Bob's Trail	21C21	2200	12/29	2	1.0	13.0	6.3
			1/29	14	3.3	26.7	9.7
Calamity Ridge +	22D01a	2500	1/3	8	1.2	12.5	-
			1/29	1	0.2	20.4	-
Council Pass +	21C18a	4200	1/3	36	10.1	28.4	18.4
			1/29	56	17.9	56.2	27.4
Cultus Creek	21C12	4000	1/3	34	10.3	29.7	15.4
			1/29	54	16.4	54.4	29.4
Divide Meadow +	21C29a	5600	1/1	58	16.8	33.3	24.7
			1/29	52	16.6	71.4	39.5
Grand Meadow	21C25	3500	1/3	14	4.1	19.1	9.7
			1/29	31	8.4	37.1	16.9
Lone Pine Shelter	21C26	3800	1/3	29	7.0	30.0	17.7
			2/1	54	12.7	49.9	28.8
Marble Mountain +	22C05a	3200	12/29	12	4.0	26.6	10.5
			1/29	21	7.1	57.1	24.4
Mosquito Meadows	21C19	4100	1/3	32	8.6	30.6	19.2
			2/1	52	15.3	51.9	31.8
New Muddy River	22C06	2200	12/29	0	0.0	13.0	5.8
			2/1	8	1.7	21.6	9.9
Old Man Pass	21C19	3100	12/29	2	0.8	12.9	4.1
			2/1	24	5.0	26.8	12.5
Plains of Abraham +	22C01a	4400	1/3	65	19.5	49.8	22.1
			1/29	90	28.8	70.7	39.0
Smith Creek Road	22C04	2100	12/29	0	0.0	19.6	6.5
			2/1	20	6.0	29.0	11.9
Spencer Meadow +	21C20a	3400	12/29	11	3.2	20.6	7.8
			1/29	31	8.4	34.3	14.3
Surprise Lakes	21C13A	4250	1/3	36	10.8	35.0	18.5
			1/29	49	15.8	66.8	32.7
Table Mountain +	21C24a	4200	1/3	42	11.8	31.3	21.1
			1/29	64	20.5	59.2	32.1
Timbered Peak +	21D18a	3000	12/29	4	1.2	19.2	7.6
			2/1	24	6.0	25.8	12.5

# Average based on 1953-67 average

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 9

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	Last Year

COWLITZ RIVER

Cayuse Pass	21C06	5300	12/29 2/1	78 106	23.8 38.9	51.2 89.8	34.3 56.3
Mosquito Meadows	21C19	4100	1/3 2/1	32 53	8.6 15.4	30.6 51.9	19.2 31.8
Ohanapecosh	21C32	2200	12/29 1/29	1 9	0.1 3.3	11.0 23.9	4.2 13.7
Packwood Lake	21C31	2870	12/29 1/31	3 12	0.7 2.9	11.2 26.8	4.0 8.6
Pigtail Peak	31C33	5900	1/1 1/30	61 80	22.5 30.0	37.2 76.5	26.0 40.9
Plains of Abraham +	22C01a	4400	1/3 1/29	65 90	19.5 28.8	49.8 70.7	22.1 39.0
Potato Hill	21C14	4500	1/3 2/1	34 41	8.0 11.5	22.7 45.6	- 20.8
White Pass (E. Side)	21C28	4500	1/4 1/30	22 29	5.7 9.1	17.3 40.9	11.1 16.7
White Pass (L. Lake)	21C27	4500	12/28 1/30	17 30	5.7 9.4	18.9 46.9	13.3 20.6
Willame Creek	21C30	3250	12/29 1/29	15 31	4.0 9.4	22.0 41.8	9.6 21.4

PUGET SOUND DRAINAGENISQUALLY RIVER

Ghost Forest	21C04	4550	12/28 1/29	40 52	12.8 17.3	31.5 60.0	13.1 30.7
Longmire	21C03	2760	12/28 1/29	4 8	0.4 2.8	11.8 23.8	2.2 7.3
New Paradise Park	21C35	5400	12/28 1/29	72 91	22.0 34.6	46.6 85.8	22.2 46.1
Stem Glade	21C01	5050	1/1 1/29	68 85	20.4 30.9	40.7 84.9	24.8 47.1

WHITE RIVER

Cayuse Pass	21C06	5300	12/29 2/1	78 106	23.8 38.9	51.2 89.8	34.3 56.3
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GREEN RIVER

Airstrip	21B24	1800	11/27 12/29 1/29	0 0 5	0.0 0.0 1.6	0.0 6.4 10.1	- -
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# Average based on 1953-67 average

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 10

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
						Average <sup>#</sup>	

GREEN RIVER (Cont.)

Charley Creek	21B25	1200	11/27	0	0.0	0.0	-
			12/28	0	0.0	4.2	-
			1/29	0	0.0	2.2	-
Cougar Mountain	21B42SP	3200	12/29	13	3.4	14.8	-
			2/1	21	6.2	31.2	-
Grass Mtn. No. 2	21B27	2900	11/27	1	0.2	2.0	2.7
			12/28	10	2.1	17.0	6.0
			1/29	17	6.0	31.1	13.6
Grass Mtn. No. 3	21B28	2100	11/27	0	0.0	0.0	-
			12/28	4	0.5	9.8	-
			1/29	5	1.5	15.0	-
Lester Creek	21B29	3100	11/27	2	0.3	4.2	3.5
			12/29	15	3.8	18.4	9.8
			1/29	29	7.8	31.8	16.3
Lynn Lake	21B50	4000	11/27	2	0.3	2.5	-
			1/1	15	3.2	23.5	-
			1/29	7	2.2	43.2	-
Sawmill Ridge	21B31	4700	11/27	8	1.9	7.2	8.0
			12/29	36	8.8	24.0	12.0
			1/29	40	13.7	49.6	27.8
Snowshoe Butte	21B43SP	5000	12/29	54	15.4	31.4	-
			2/1	74	27.2	72.4	-
Stampede Pass Pillow	21B10	3860	Not Measured		7.2	7.4	
			Not Measured		22.8	10.8	
			1/1	-	11.5	16.6	16.9
			1/18	-	14.8	38.6	21.4
			2/1	-	18.5	50.0	28.8
Twin Camp	21B30	4100	11/27	4	0.7	4.7	5.3
			12/29	24	4.7	17.5	10.8
			1/29	25	7.7	30.0	19.3

SNOQUALMIE RIVER

Olallie Meadows	21B02	3625	2/1	44	14.6	59.7	30.2
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SKYKOMISH RIVER

Stevens Pass	21B01	4070	10/31	8	1.1	2.4	-
			11/14	13	2.9	6.3	-
			11/29	24	6.0	10.6	10.0
			12/14	39	8.4	21.2	14.7
			12/27	52	15.4	30.3	20.8
			1/15	64	21.8	46.0	26.6
			1/29	78	26.0	60.1	34.4

# Average based on 1953-67 average



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 11

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD		
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	Last Year	Average #
<b>SKYKOMISH RIVER (Cont.)</b>								
Stevens Pass Sand Shed	21B45	4070	11/29	12	2.5	5.6	-	
			12/14	20	3.5	14.6	-	
			12/27	35	9.1	21.1	-	
			1/15	46	14.6	32.9	-	
			1/29	54	18.4	42.7	-	
<b>SKAGIT RIVER</b>								
Beaver Creek Trail	21A04	2200	1/29	19	6.6	16.0	-	
Beaver Pass	21A01	3680	1/28	47	14.0	34.6	-	
Brown Top Ridge +	21A28a	6000	1/28	116	38.6	61.0	-	
Cloudy Pass +	20A22a	6500	1/30	74	22.2	40.3	29.4	
Devils Park	20A04	5900	1/28	85	27.2	45.9	30.2	
Freezeout Creek Trail	20A01	3500	1/28	27	8.0	18.2	-	
Freezeout Meadows New	20A38	5000	1/28	61	17.4	New Course		
Granite Creek	21A29A	3500	1/27	38	10.4	22.5	-	
Harts Pass	20A05A	6500	1/28	89	25.9	44.3	28.2	
Klesilkwa	35B-Can	3700	2/1	24	5.0	-	10.7*	
Lake Hozomeen	21A02	2600	1/29	10	2.6	12.5	-	
Lyman Lake	20A23A	5900	1/30	130	39.0	-	38.9	
Meadow Cabins	20A08	1900	1/27	9	2.8	13.0	-	
New Hozomeen Lake	21A30	2800	1/29	19	4.8	16.0	-	
New Tashme	26A-Can	2500	1/29	11	4.0	20.1	8.7*	
Rainy Pass	20A09	4780	1/27	88	26.0	43.8	27.5	
Thunder Basin	20A07	4200	1/29	42	11.2	27.4	-	
<b>BAKER RIVER</b>								
Baker Pass +	21A27a	4900	Not Measured					
Dock Butte +	21A11A	3800	10/30	12	3.6			
			11/14	20	6.0			
			12/4	28	8.4			
			12/15	36	12.6	38.1	-	
			1/3	70	27.0	45.5	-	
			1/26	96	41.0	70.3	46.8	
Easy Pass +	21A7A	5200	10/30	2	0.6			
			11/14	18	5.4			
			12/4	24	7.2	-	-	
			12/15	25	8.7	33.0	-	
			1/3	68	26.0	40.6	-	
			1/26	88	38.0	72.6	59.0	

# Average based on 1953-67 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 12

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD		
	NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)
				Last Year	Average	#
<u>BAKER RIVER (Cont.)</u>						
Jasper Pass +	21A6A	5400		10/30	8	2.4
				11/14	28	8.4
				12/4	53	15.9
				12/15	Not Measured	49.5
				1/3	120	57.4
				1/15	Not Measured	-
				1/26	148	64.0
Marten Lake	21A09A	3600		10/30	12	3.6
				11/14	10	3.0
				12/4	40	12.0
				12/15	46	16.1
				1/3	88	33.0
				1/15	Not Measured	-
				1/26	118	51.0
Mt. Blum +	21A18a	5800		10/30	4	1.2
				11/14	12	3.6
				12/4	29	8.7
				12/15	N/A Windy	35.1
				1/3	100	41.6
				1/26	108	54.7
Panorama New	21A26	4300		1/15	81	30.7
				1/29	102	35.7
Rocky Creek	21A12A	2100		10/30	15	4.5
				11/14	0	0.0
				12/4	2	0.6
				12/15	18	6.3
				1/3	23	9.0
				1/26	96	41.0
Schreibers Meadow	21A10A	3400		10/30	3	0.9
				11/14	4	1.2
				12/4	12	3.6
				12/15	22	7.7
				1/3	48	18.0
				1/26	72	31.0
S. F. Thunder Creek +	21A14A	2200		10/30	2	0.6
				11/14	0	0.0
				12/4	1	0.3
				12/15	6	2.1
				1/3	8	3.0
				1/26	6	3.0

# Average based on 1953-67 average

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO FEBRUARY 1, 1973 - APPENDIX 13

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Number	Elevation					Average
<u>BAKER RIVER (Cont.)</u>							
Watson Lakes	21A08A	4500	10/30	10	3.0		
			11/14	12	3.6		
			12/4	32	9.6		
			12/15	N/A Windy		35.4	-
			1/3	62	24.0	46.9	-
			1/26	86	37.0	68.4	46.0
<u>NOOKSACK RIVER</u>							
Glacier Creek	21A23	3700	12/1	0	0.0	4.1	-
			1/3	22	5.4	15.6	-
			2/2	33	7.9	32.8	
Panorama New	21A26	4300	1/15	81	30.7	53.7	-
			1/29	102	35.7	71.3	-
<u>OLYMPIC PENINSULA</u>							
<u>DUNGENESS RIVER</u>							
Deer Park	23B04	5200	1/31	43	13.3	24.6	16.3
<u>MORSE CREEK</u>							
Cox Valley	23B14	4500	1/28	71	23.8	47.6	-
<u>ELWHA RIVER</u>							
Hurricane	23B03	4500	1/30	45	11.7	26.5	17.5
<u>SKOKOMISH RIVER</u>							
Black & White	23B07	4200	1/1	43	12.8	24.2	-
			1/27	74	22.9	40.5	29.0
Black & White Lakes	23B06	4700	1/3	65	24.7	37.6	-
			1/27	97	36.7	61.4	41.5
Four Streams	23B10	3000	1/3	10	2.4	24.3	-
			1/27	35	9.4	33.2	26.7
Home Sweet Home	23B05	5200	1/3	83	28.4	48.0	-
			1/27	122	43.8	74.0	54.8
<u>COLEDUCK RIVER</u>							
Deer Lake	23B01	3900	Not Measured				

# Average based on 1953-67 average



# Agencies Assisting with Snow Surveys

## GOVERNMENT AGENCIES

### Canada:

Department of Lands, Forests and Water Resources,  
Water Resources Service, British Columbia

### States:

Washington State Department of Ecology  
Washington State Department of Natural Resources

### Federal:

Department of the Army  
Corps of Engineers  
U. S. Department of Agriculture  
Forest Service  
U. S. Department of Commerce  
NOAA, National Weather Service  
U. S. Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Geological Survey  
National Park Service

## PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.  
Pacific Power and Light Company  
Puget Sound Power and Light Company  
Washington Water Power Company

## OTHER PUBLIC AGENCIES

Okanogan Irrigation District  
Wenatchee Heights Irrigation District

## MUNICIPALITIES

City of Tacoma  
City of Seattle

*Other organizations and individuals furnish valuable information for  
snow survey reports. Their cooperation is gratefully acknowledged.*



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—  
“The Conservation of Water begins  
with the Snow Survey.”